平地愛玉子生產及授粉技術改進

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摘 要：愛玉在本省中部平地試區氣候條件下，調查標本園三年生結果株結果及授粉情形，雄株在32品系中有15品系結果情形良好，年度結果期開始於3至4月間，7至8月為第二期，10月左右為第三期，雌株結果期與雄株一致，在156品系中有30品系生育及結果情形符合經濟性狀，期間並可陸續產生小果，各品系間結果數略有差異，雌雄結果數均以第二期盛果期較高，21天3次調查平均結果數雄株為21果/每株，雌株為26果/每株。幼果生長發育至開口授粉時間因不同品系而有差異，約在18至26天之間，可授粉期平均5-7天，未授粉果呈現紫褐色，並陸續落果。愛玉小蜂因雄果越冬數量不足，一期果與二期果均需引進授粉小蜂，成熟小蜂平均以2-4天時間離開雄果，雄蕊長及緻密者不利於小蜂之進出。第三期雄果為田間涵養愛玉小蜂越冬之重要果期，並為次年春季一期果授粉蜂之種源，目前試區雄株有11品系自然授粉成功，顯示田間授粉生態已初步建立。

Improvement on Production and Pollination technique of jelly-fig

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Abstract: Under the weather condition in the central plain of Taiwan, the results of examining the fruit setting and pollination of the 3-year jelly-fig plants grown in an experiment field show that 15 strains of the 32 male strains have good fruit setting. The annual fruit setting starts between March and April followed by the 2nd crop between July and August and the 3rd crop on October. The crop seasons of female strains are similar to the males. Among 156 females strains, the development and fruit setting situation of 30 strains are apt for economic traits. These 30 strains continuously set fruit during the experiment period. The number of fruit per plant differs among strains but peaks in the 2nd crop on both sex plants, and is 21 on males and 26 on females based on the 3 counts in 21 days. The duration for young fruit to develop to ready for pollination is different among strains and ranges from 18 to 26 days. Duration of suitable pollination is 5-7 days. Un-pollinated fruit wilts and shreds. The overwintering population of jelly-fig wasp is not low, thus the pollination of the 1st and the 2nd crop seasons has to depend on wasp introduction. Mature adult wasps leave male fruit in 2-4 days. Long and dense stagminates hinder the wasp from moving through the opening on the fruit end. The 3rd crop season is important on retaining the overwintering wasp population in field that serves a pollination resource for the spring crop. Up to date, eleven male strains have successful natural pollination indicating the field pollination ecology has been primarily established.